2022

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#vizientsummit

Reimagining the Inbox: A Tale of Two Hospitals

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Learning Objectives

- Describe the relationship between patient messages and care team wellness.
- Discuss new processes proven to alleviate some of the patient messaging burden on clinic teams.

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Stanford Medicine

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Stanford Medicine

- Not-for-Profit Comprehensive Academic Medical Center
- Located in Palo Alto, CA
- 605 licensed beds, 53 operating rooms, 72,532 annual ED visits (16,316 pediatric), 2,016,490 outpatient visits, 695,263 virtual visits, $464M community benefit investment
- 16,000 employees, 2,800 medical staff and more than 1,300 residents and fellows

Measure In Basket Impact on Burnout

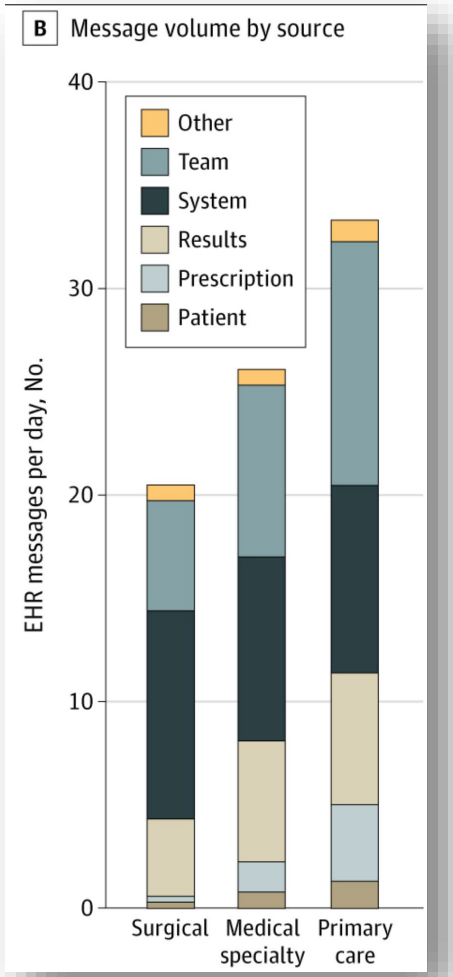
JAMA Internal Medicine

Research Letter

March 22, 2021

Differences in Total and After-hours Electronic Health Record Time Across Ambulatory Specialties

Lisa S. Rotenstein, MD, MBA[1,2]; A. Jay Holmgren, MHI[1,3]; N. Lance Downing, MD[4]; et al

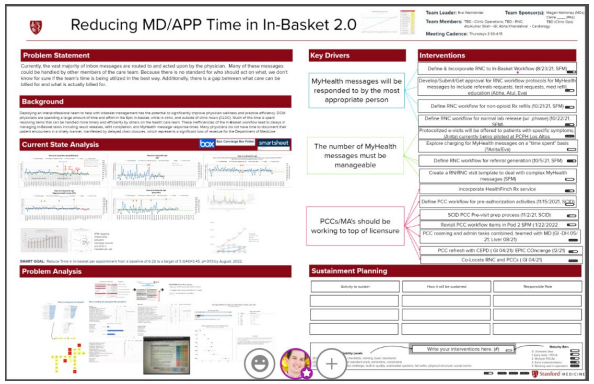


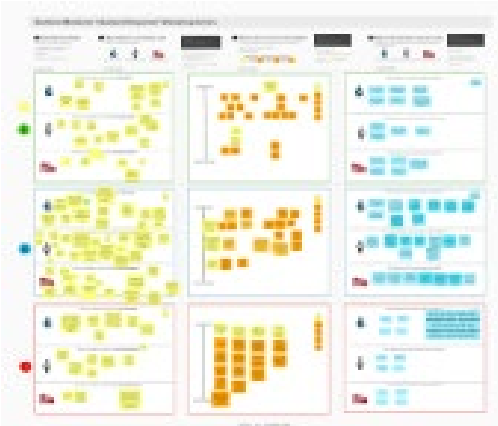
Source: Rotenstein, 2021 (JAMA IM)

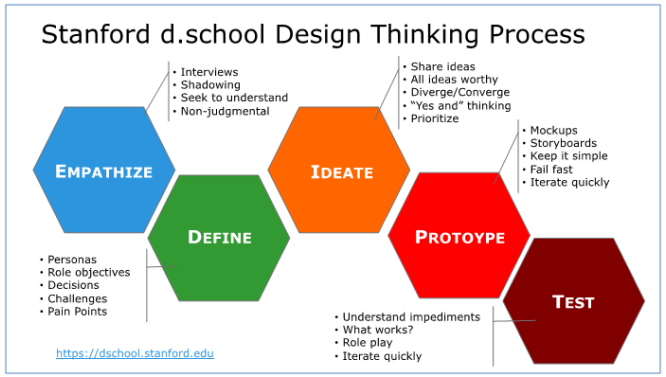
- Usability and Attitude
- Time in Inbox
- Task Volume
- Task Characteristics

Stanford | MEDICINE

Stanford's Approach to Problem Solving







- Backlog Clean-up and Auto-expiration
- Low Value System Message Reduction
- In Basket Ux Optimization
- Patient Message Optimization
- Rx Refill Efficiency

- Team Messages
- AI/Advanced Analytics

Traditional A3 Method

- Grass roots projects
- Inter-clinic collabs teams
- Small tests of change

Broadly Inclusive Kaizen Workshops

- Enterprise lenses
- Inter-dept collaboration
- Generalizable diagnosis

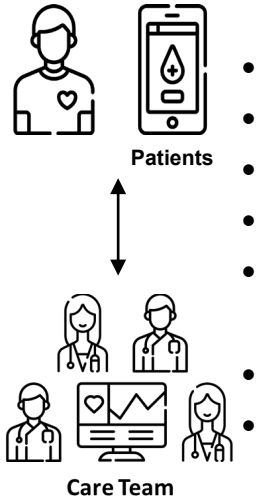
Design Thinking Empathy Interviews

- Deep-dive interviews
- Intimate understanding
- Lens of feeling

Inform Org-level Workstreams

- Governance
- Report optimization
- Standard work and build

Test of Change and Innovation



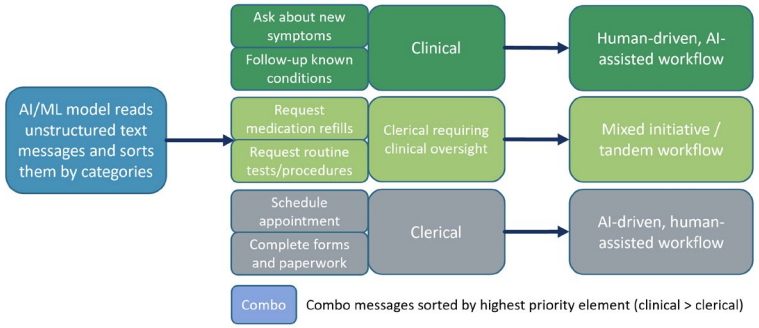
- Message triage
- Visual management
- Order pending
- Normal lab release
- Reply time expectations
- Time protection
- Right care/right modality

Workflow Changes

Symptom	Cause(s)	Guidance
Repeat messages for same issue	Patient concern their problem won't be addressed in a timely manner	• Communicate response time expectations for mos • Create **message triage process** to prioritize & proc response needed in 2 hours) • Create & document clinic standards designed to as • Where possible, incorporate personal touch to res
Inconsistent/varied team performance with inbox work	Ineffective or non-existent training on workflow standards related to inbox ; workflow standards that differ by provider	• Create and document workflow standards for all te • Incorporate standards into team member training • Minimize frequent task switching (cognitive burde • Standardize workflows as much as possible across
Patient messages not appropriate for resolution via electronic message	Ineffective of non-existent pathways to identify patient need & route to appropriate care delivery platform	• Create standards for appropriate platform (messag • Convert encounters to most appropriate platform • Educate patients on what services are offered via v
Patient messages contain lots of information, not necessarily the information needed for team to assist	Patients don't know what information the clinic team will need to help them	• Document standard patient questions for most comr • Assign team role to interpret messages, translate int
Messages being processed by inappropriate team members	Unclear which actions need to be taken for patient messages Unclear which team member is responsible for taking which actions	• Create and document standards for actions & who is lab release, medication refills, notes for school/work
Cumbersome team coordination: actions need to be taken by multiple team members	Unclear which actions need to be taken by whom ; unclear what has been completed vs what is outstanding ; patient messages do not get documented in patient chart	• Create a visual que for patient messages (i.e. edit sut referred to another team member. • Create protected time for team-based processing of • Minimize message touches, even if it means address • Convert overly-complex messages to more appropria

"Troubleshooting" Guide

HEART
Stanford Healthcare AI Applied Research Team



Artificial Intelligence / Natural Language Processing

Ochsner Health

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Ochsner Health

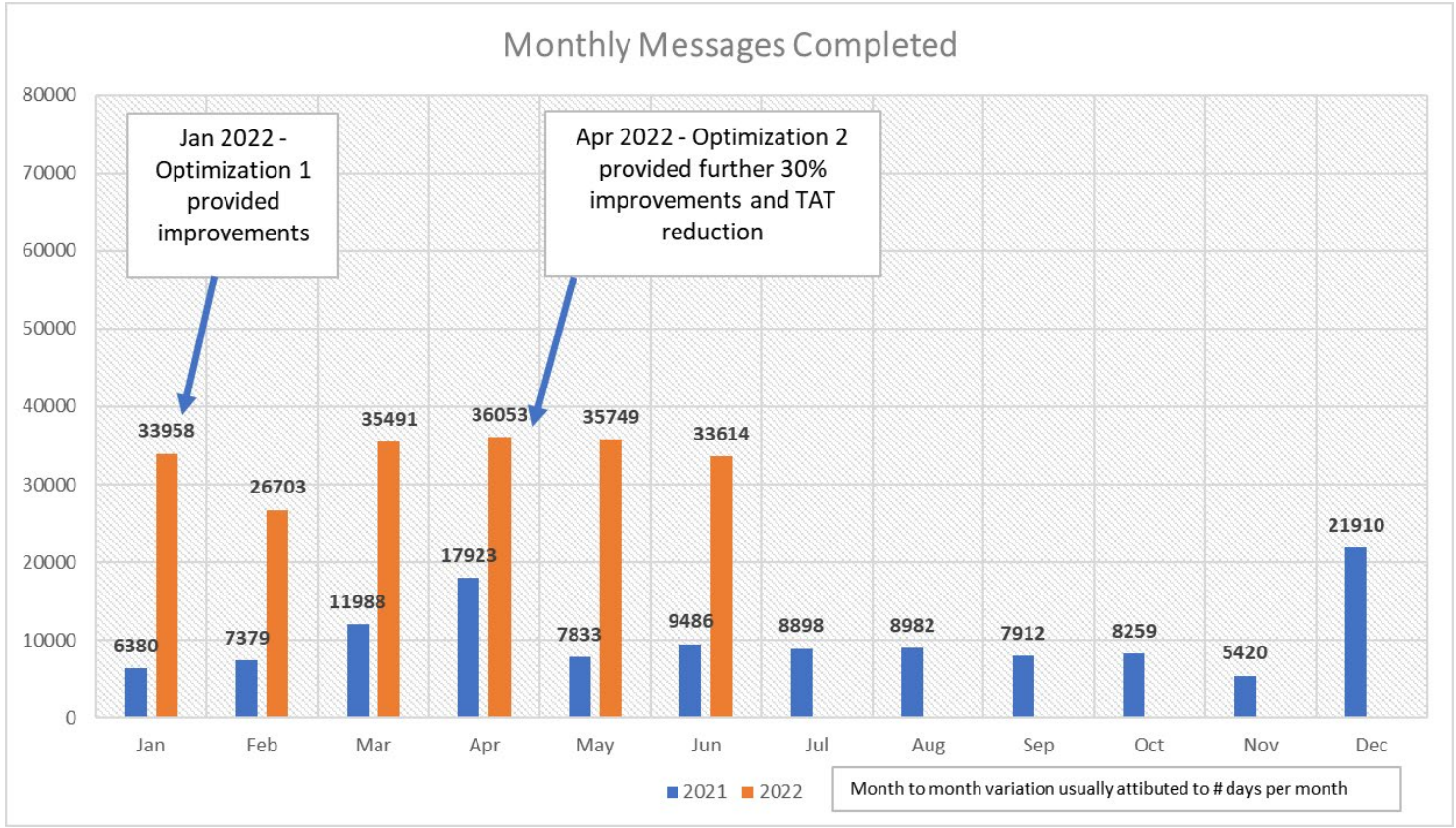
- Not-for-Profit Integrated Healthcare System
- Located in the Gulf South
- 40 hospitals and more than 300 health and urgent care centers
- 34,000 employees and over 4,500 employed and affiliated physicians in over 90 medical specialties and subspecialties
- 300+ and growing Primary Care Physicians

Ochsner Refill Center Overview

Operational Metrics - June 2022

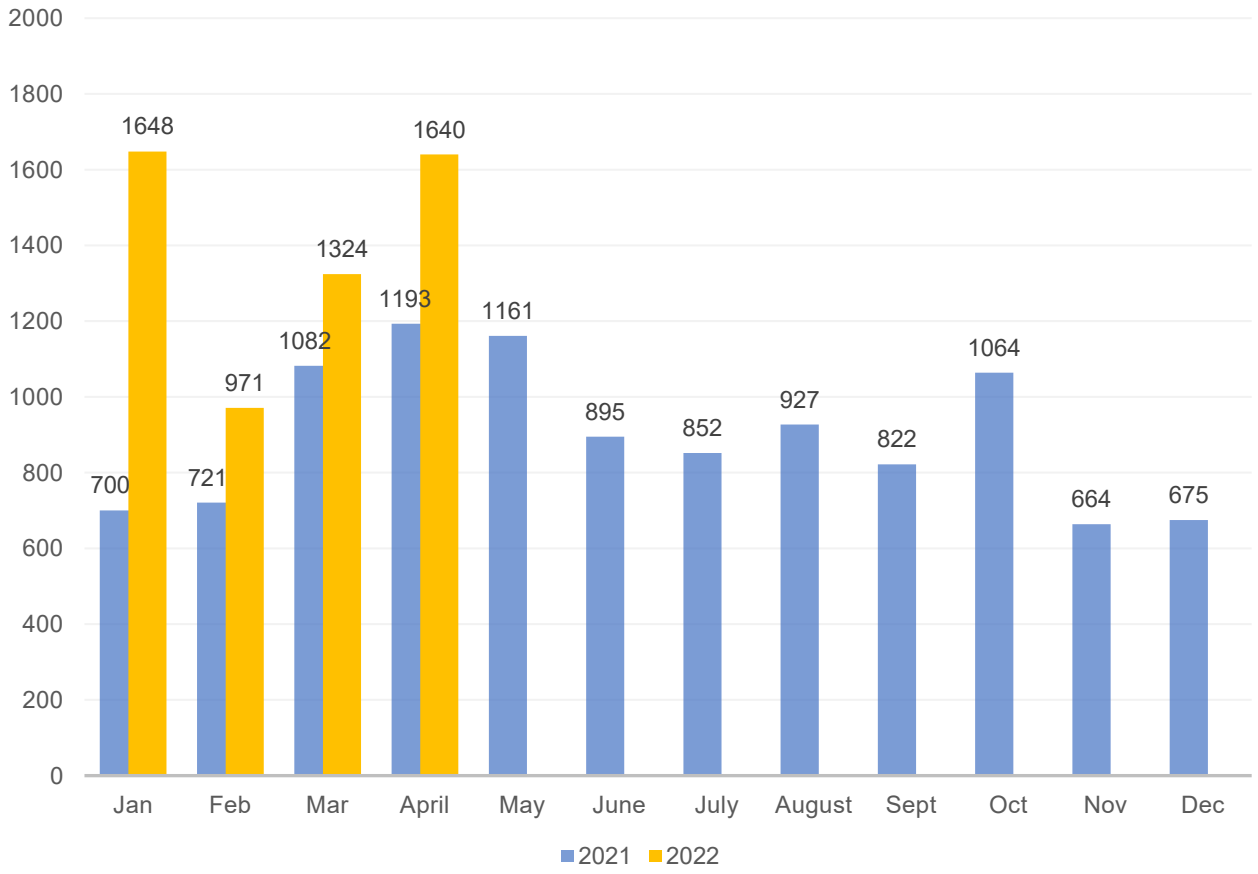
- Small Team: 1 Leader, 2 PharmDs, 11 Medication Specialists
- Total Messages Received - 36,000 per month
- # of Physicians enrolled - 190 MDs
- # of Interventions - 1,600+ per month
- # of Care Gaps closed - 6,750 per month
- % of Refills Managed - 45%-50%
- Benefit to physicians - 20-30 min per day
- Average Message Turn Around Time - 0.45 days
- % of Messages with a 24 hour Turn Around - 88%

Messages Processed Year over Year



Medication Error Reduction

Pharmacy Interventions per Month



Types of Interventions- April 2022

Adverse drug reaction	52
Drug Disease Interaction	918
Drug-Drug Interaction	139
Medication Education	1
Therapeutic Duplication	63
Nonadherence	33
Medication Affordability	10
Dose Adjust	233
No indication	191

Panel Discussion

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Questions?

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Lesson Learned & Key Takeaways for Reference

Lessons Learned - Ochsner Health

- Involve providers early in the decision process
- Perform customer interviews to find pain points
- Track reasoning for why every decision is made
- Develop easy to read report cards to share early
- By reducing turnaround-time you also reduce duplicate messages
- Faxes are more work for clinic staff compared to electronic requests
- Not everything will fit neatly into an algorithm
- Electronic medical health records update often – be ready to adapt
- Message management can be a new opportunity for remote work for clinical staff
- Constant workflow changes can be hard on staff

Key Takeaways - Ochsner Health

- Find provider, pharmacy, nursing, and operations champions to spearhead the project
  - Every service line has something to contribute to the recipe for success
- Start with your most common and most challenging message type(s)
- Use your champions committee to decide on the minimum requirements for safety and quality for each message type
- Be open and agile
  - Technology improves exponentially; be ready to adapt

Lessons Learned - Stanford Medicine

- The relationship between the In Basket and burnout is complex, the evidence is incomplete, and using quantitative data alone to understand this problem is a challenge
- Increased volumes of electronic messages are here to stay, so processes which properly prioritize and route the messages are a must
- Time spent trying to measure a problem should not exceed time spent solving the problem
- The messaging problem requires a multi-pronged approach: local diagnosis and experimentation, enterprise-level diagnosis and guidance, as well as partnering with other industries
- Ideally, senior leadership should endorse organizational standards for electronic messaging *before* local experimentation begins
- The concept of message triage was found to be very impactful by those clinics performing this function on messages

Key Takeaways - Stanford Medicine

- Use all the metrics you have access to, build expertise in them, but recognize their limitations and the value of qualitative feedback from users
- Don’t let the complexity of a problem discourage efforts to understand it and solve it
- Acknowledgement and ownership of the problem must be genuine in both local and senior leaders for meaningful improvement to be achieved
- Leveraging a combination of approaches (A3, design thinking, partnering with industry) is helpful to offer a more complete picture of the problem one is trying to solve
- When a problem presents differently from one clinic to the next, a problem-solving aid can be more helpful than a generalized solution

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